

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A manufacturing method of a thin component, including the steps of

heating a thin component, and thereafter, while sizing with molds and using said molds as cooling media of said thin component, performing a quenching process on said thin component, wherein

after said thin component is quenched, said thin component is tempered using said molds as temperature controlling media,

said quenching process causes a martensitic transformation,

a material of the thin component is steel containing carbon by at least 0.4 mass %,

the thin component is a bearing ring of a thrust needle roller bearing, [[and]]

in said quenching, a pressing pressure by said molds is at least 2.94 N/cm^2 ,

the molds include an upper mold and a lower mold, and

a heat capacity of one of the upper mold and the lower mold is at least 90 times as great as that of the thin component.

2. (Previously Presented) The manufacturing method of a thin component according to claim 1, wherein

said step of sizing said thin component with said molds includes the step of pressing said thin component with said molds.

3. (Previously Presented) The manufacturing method of a thin component according to claim 1, wherein

said quenching of said thin component is performed using said molds as quenching media.

4. (Previously Presented) The manufacturing method of a thin component according to claim 1, wherein

said molds have cooling means, and said thin component can continuously be quenched by said molds.

5. (Previously Presented) The manufacturing method of a thin component according to claim 1, wherein

said thin component is quenched in an atmosphere in which oxidation of said thin component is prevented.

6. (Cancelled)

7. (Previously presented) The manufacturing method of a thin component according to claim 1, wherein

said molds are used in both of said steps of quenching and tempering said thin component.

8. (Previously Presented) The manufacturing method of a thin component according to claim 1, wherein

in said step of quenching said thin component, a molding process of said thin component using said molds is concurrently performed.

9. (Previously Presented) The manufacturing method of a thin component according to claim 1, wherein

said heating of said thin component is performed by induction heating.

10. (Cancelled)

11. (Withdrawn) A bearing ring, wherein said bearing ring is manufactured by the method according to claim 1.

12. (Withdrawn) A thrust needle roller bearing, wherein said bearing ring according to claim 11 is used.

13. (Previously Presented) A manufacturing method of a rolling bearing ring, comprising the step of,

after heating a rolling bearing ring as said thin component using the manufacturing method of a thin component according to claim 1, by cooling said rolling bearing ring while pressing with said molds and using said molds as quenching media, quenching said rolling bearing ring.

14. (Previously Presented) The manufacturing method of a rolling bearing ring according to claim 13, wherein

said heating of said rolling bearing ring is performed by induction heating.

15. (Previously Presented) The manufacturing method of a rolling bearing ring according to claim 13, wherein

said rolling bearing ring is mid-carbon steel containing carbon by at least 0.4 mass %.

16. (Canceled)

17. (Withdrawn) A rolling bearing ring, wherein said rolling bearing ring is manufactured by the method according to claim 13.

18. (Withdrawn) A rolling bearing, comprising said rolling bearing ring according to claim 17 and a rolling element.

19. (Withdrawn) The rolling bearing according to claim 18, wherein said rolling bearing is a thrust needle roller bearing.